

## **REMARKS**

Claims 9, 11-13, 15-32, 35, 37, 38, 40, 41, 43-58, 64, 66-71, 82-87, 89-108, 171, and 172 are pending in the Application. Claims 32, 35, 37, 38, 40, 41, 43-48, 50-58, 69-71, and 172 were indicated as allowed and claims 9, 11-13, 15-31, 49, 64, 66-68, 82-87, 89-108, and 171 were rejected in the Office action mailed June 11, 2009. Claims 9, 32, 82, 171, and 172 are independent claims. Claims 9, 49, 82, and 171 are amended by this response. Claims 11-13, 15-31, 64, 66, 67, and 68, claims 35, 37, 38, 40, 41, 43-58, 69, 70, and 71, and claims 83-87 and 89-108 depend, respectively, from independent claims 9, 32, and 82.

As an initial matter, the Office action states in the "Response to Amendment" at page 2 that "no claims have been amended." Applicants respectfully submit that the response filed March 30, 2009 showed at pages 9 and 16, and stated at page 21 that claim 49 and 171 had been amended.

Applicants appreciate recognition by the Office that all of claims 9, 11-13, 15-32, 35, 37, 38, 40, 41, 43-58, 64, 66-71, 82-87, 89-108, 171, and 172 are allowable over the prior art of record. See "Office Action Summary" Box 5 and page 3.

The Applicants note that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, USPTO personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, USPTO personnel should indicate how rejections may be overcome and how problems may be resolved. **A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.**

M.P.E.P. § 2106(II) (emphasis added).

As such, the Applicants assume, based on the goals of patent examination noted above, that the current Office Action sets forth "all reasons and bases" for rejecting the claims.

Applicants respectfully request reconsideration of the claim rejections, in light of the following remarks.

### **Rejections under 35 U.S.C. §112**

Claims 9, 49, 82, and 171 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse the rejection.

The Office states, at page 2, "...The claims each recite the phrase 'about' when describing various values using by the claimed device. It is not clear from the specification exactly what range of values could be used in each case in order to get the desired results. For the purpose of examination, the examiner assumes all of the about phrases were removed." The Office also states, in part at page 3, "The claims rejected under the 112 rejection would be allowable if the phrase 'about' was removed from the independent claims." Applicants express appreciation for the suggested change to the language of the rejected claims to place the claims in condition for allowance.

**In response to Applicants' arguments set forth on pages 19-21 of the Response filed March 30, 2009, the Office states, at page 3, "[as per applicant's argument that the 'about' 10 db term is clearly as per the specification, the examiner disagrees. Applicant's specification does not provide all of the specific implementation details and values used. One skilled in the art would not be able to discern what range/tolerance of values would fall under 'about 10 dB['] from applicant's specification."**

With regard to independent claim 9, Applicants respectfully submit that claim 9 has been amended so that it now recites, in part, "...wherein the echo is canceled from the

near end signal when the power level of the far end signal minus the echo return loss is greater than both a threshold of hearing and the power level for the noise minus 8-12 dB."

Applicants respectfully maintain that the language of claim 9 is supported by the Specification at, for example, Fig. 7 and page 21, line 5 to page 29, line 8. More specifically, the Specification states, at page 27, lines 3-6, in part, "...if the maximum power level ( $P_{\text{refmax}}$ ) of the reference signal minus the estimated ERL is less than the maximum of either the threshold of hearing, or background power level  $B_{\text{err}}$  of the error signal minus a predetermined threshold ( $P_{\text{refmax}} - \text{ERL} < \text{threshold of hearing or } (B_{\text{err}} - \text{threshold})$ ) neither echo cancellation or non-linear processing are invoked." This portion of the disclosure states when echo cancellation is is not performed. The Specification identifies the term "reference signal" as "reference signal 126(b)", which is the "voice decoder output signal 120(b)" [the "far end signal", as opposed to the "near-end signal 122(b)"] after it has been compressed and expanded, for the reasons explained at page 21, lines 18-23. The Specification, at page 26, lines 13-14, identifies the variable  $B_{\text{err}}$  as the "estimated energy level of the background noise of the error signal ( $B_{\text{err}}$ )". Applicants respectfully submit that the Specification further states, at page 27, line 12, "The threshold is preferably in the range of about 8-12 dB." Restating the language of the claim, substituting the terms used in the Specification, we arrive at "...wherein the echo is canceled from the near end signal when the power level of the far end [reference] signal minus the echo return loss is greater than both a threshold of hearing and the power level for the noise [ $B_{\text{err}}$ ] minus [a predetermined threshold of] about 8-12 dB...." Applicants respectfully maintain that while the Specification describes when cancellation is is not performed, the claim was simply drafted to recite the condition when echo cancellation is performed, by reversing the sense of the inequality and changing the logical operation "or" to "and".

Applicants have amended claim 9 to modify the text that previously read "about 10 dB" to read "8-12 dB." Applicants have shown above that a range of "about 8-12 dB" is taught by the Specification at page 27, line 12. Applicants' amendment merely removes the use of the word "about" from the range of "about 8-12 dB" as disclosed by the Specification, consistent with the suggestion by the Office to remove the word "about" in the rejected claim language "about 10 dB," to eliminate the uncertainty of

range/tolerance allegedly present in the language of claim 9 prior to amendment. Applicants respectfully submit that one of ordinary skill in the relevant art would be able to discern what range/tolerance of values would fall under '8-12 dB,' as now recited by amended claim 9. Therefore, Applicants respectfully submit that amended claim 9 clearly shows what range of values could be used in order to get the desired results. Therefore, Applicants respectfully submit that claim 9 as amended is both clear and definite. Accordingly, Applicants respectfully request that the rejection of claim 9 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

With regard to claim 82, Applicants respectfully submit that claim 82 is rejected for the same reason as claim 9. Accordingly, Applicants have amended claim 82 similar to the amendment of claim 9 to recite language supported by the Specification and to eliminate the use of the word "about". Accordingly, Applicants respectfully submit that claim 82 is allowable for at least the reasons set forth above with regard to the rejection of claim 9, and respectfully request that the rejection of claim 82 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

With regard to claims 49 and 171, Applicants have amended claims 49 and 171 as shown above to eliminate the use of the word "about" in the language of claim 49 that previously recited "about 1/8", so that it now recites "1/8", and have eliminated the use of the word "about" in the language of claim 171 that previously recited "about 23-33 dB", so that it now recites "23-33 dB", as suggested by the Office. Applicants respectfully submit that claims 49 and 171 as amended are clear and definite, are in compliance with 35 U.S.C. §112, second paragraph, and respectfully request that the rejection of claims 49 and 171 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

## **CONCLUSION**

In general, the Office Action makes various statements regarding the claims and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

Applicants believe that all of pending claims 9, 11-13, 15-32, 35, 37, 38, 40, 41, 43-58, 64, 66-71, 82-87, 89-108, 171, and 172 are in condition for allowance.

Applicants respectfully request, should the Examiner disagree or have any questions regarding this submission, that the Examiner telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any fees required by this submission to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: August 11, 2009

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